

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.**

(19) 日本国特許庁 (J P)

(12) 公開特許公報 (A)

(11) 特許出願公開番号

特開2002-45378

(P2002-45378A)

(43) 公開日 平成14年2月12日 (2002.2.12)

(51) IntCl.

識別記号

F I

テーマト\* (参考)

A 6 1 C 17/02  
17/00

A 6 1 C 17/00  
17/02

T  
B  
G  
F

審査請求 未請求 請求項の数 4 書面 (全 5 頁)

(21) 出願番号 特願2000-270806(P2000-270806)

(22) 出願日 平成12年8月3日(2000.8.3)

(71) 出願人 591080966

株式会社ケントス

東京都葛飾区立石1丁目3番9号

(72) 発明者 松井 利行

神奈川県横須賀市深田台25

(72) 発明者 石黒 三郎

東京都杉並区浜田山4-4-21

(72) 発明者 梶 純也

神奈川県横浜市鶴見区東寺尾4-16-13

(72) 発明者 海老原 利好

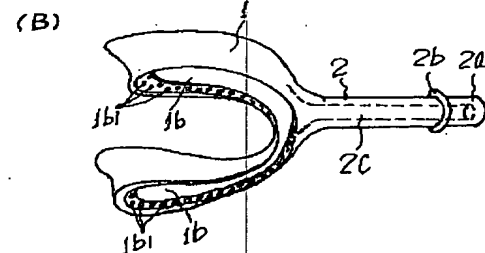
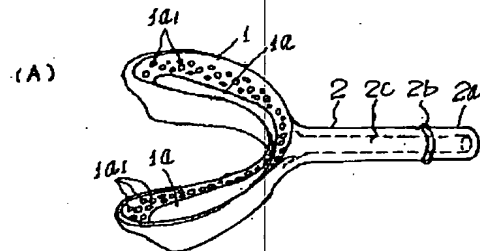
東京都江東区亀戸1-19-6-1110

(54) 【発明の名称】 口腔洗浄装置

(57) 【要約】

【課題】 歯ブラシによる歯および歯肉の刷掃ができない場合などに有効な歯の洗浄装置を提供する。

【解決手段】 本体1は人体の口腔内の歯列に沿って彎曲させたU字状のゴム状材で形成、上下面に溝1a、1bをそれぞれ設け、この上下の溝内に上下の歯をそれぞれ入れて啞えることができる構造とし、断面は概ねH字状である。2は本体1を口腔内に挿入して歯で啞えた場合、本体1を口腔外の手元で把持できるように延設した保持部である。溝1a、1bの前後壁面に洗浄液を噴出する複数のノズル1a<sub>1</sub>、1b<sub>1</sub>を設け、前記保持部2から前記ノズル1a<sub>1</sub>、1b<sub>1</sub>までを連結する連通管2cを内部に形成し、保持部先端2aには水道管のホースに結合する手段を備える。ノズル1a<sub>1</sub>、1b<sub>1</sub>から噴出する水道水により歯の洗浄が簡単容易に行える。



## 【特許請求の範囲】

【請求項1】 人体の口腔内の歯列に沿って彎曲させ、上下面にそれぞれ溝を形成し、該上下の溝内に人体の上下の歯をそれぞれ入れて啞えることができる構造の、断面H字状の、ゴム状材で形成した本体と、前記本体を口腔内に挿入して上下の歯で啞えた場合、前記本体を口腔外の手元で保持するように本体から手元側へ延設した保持部と、よりなり、前記溝の前後両側の壁面に、洗浄液を噴出する複数のノズルを設け、前記保持部末端の開口部から前記複数のノズルすべてに対して連結する連通管を内部に形成し、保持部先端には水道管のホースに結合する手段を備えることを特徴とする口腔洗浄装置。

【請求項2】 本体は、口腔内の歯列すべてをカバーするような、概ねU字状とするか、あるいは、口腔内の歯列を2分して左右2回に分けてカバーするような、概ねJ字状とすることを特徴とする請求項1に記載の口腔洗浄装置。

【請求項3】 保持部には洗浄薬液を収容する薬液槽と、該薬液槽から保持部内の連通管に洗浄薬液供給を制御するバルブと、を備えることを特徴とする請求項1、2に記載の口腔洗浄装置。

【請求項4】 保持部には水道水の流量調節弁を備え、本体に供給される水量を調整可能とすることを特徴とする請求項1、2、3に記載の口腔洗浄装置。

## 【発明の詳細な説明】

## 【0001】

【発明の属する技術分野】本発明は保健衛生装置に関し、特に歯を中心とした人体の口腔内を清浄なものとするための装置に関する。

## 【0002】

【従来の技術】人体の口腔内を清潔にするための装置、特に歯の刷掃については、歯の面に付着した食物残渣や歯垢を機械的に除去して虫歯を予防する効果があり、また、歯石の沈着を防止し、歯周炎を予防し、歯肉マッサージ効果がある。そこで、従来から例えば、ある程度の強力な圧力をもって水や薬液等の液体を噴出させ、歯や歯茎にこれを吹き付けて洗浄したり歯肉を鍛えたりするものがある。また、電動歯ブラシとして、電動によって回転あるいは往復動するブラシを歯や歯肉に当てて清浄化したり磨いたりする装置も普及している。

## 【0003】

【発明が解決しようとする課題】このような従来の人体の歯の刷掃のための装置においては、清浄化する歯の範囲が部分的であって、広い範囲を対象としていない。従って、口腔内の広い範囲を清浄化しようとする場合、作業に時間がかかり、効率的なものではなかった。また、自身での操作を前提としているため、病人や、手の不自由な人、高齢者などにとっては決して使い勝手のよいものではなかった。本発明はこのような従来の装置を、寝

たきりの人や、手の不自由な人、あるいは病人、高齢者であっても使用が簡単で、清浄効果が充分にあり、しかも本人でなく、介護をする人にとって扱いやすいものとするを目的としている。

## 【0004】

【課題を解決するための手段】上記の課題は本発明によれば、人体の口腔内の歯列に沿って彎曲させ、上下面にそれぞれ溝を形成し、該上下の溝内に人体の上下の歯をそれぞれ入れて啞えることができる構造の、断面H字状の、ゴム状材で形成した本体と、前記本体を口腔内に挿入して上下の歯で啞えた場合、前記本体を口腔外の手元で保持するように本体から手元側へ延設した保持部とよりなり、前記溝の前後両側の壁面に、洗浄液を噴出する複数のノズルを設け、前記保持部末端の開口部から前記複数のノズルすべてに対して連結する連通管を内部に形成し、保持部先端には水道管のホースに結合する手段を備えることにより解決される。

【0005】また、上記の課題は本発明によれば、前項において、本体は、口腔内の歯列すべてをカバーするような、概ねU字状とするか、あるいは、口腔内の歯列を2分して左右2回に分けてカバーするような、概ねJ字状とすることによって解決される。

【0006】また、上記の課題は本発明によれば、前項までの解決手段において、保持部には洗浄薬液を収容する薬液槽と、該薬液槽から保持部内の連通管に洗浄薬液供給を制御するバルブとを備えることで解決することができる。

【0007】また、上記の課題は本発明によれば、前項までの解決手段において、保持部には水道水の流量調節弁を備え、本体に供給される水量を調整可能とすることで解決される。

## 【0008】

【発明の実施の形態】本発明は、人体の上下の歯のかたちに合わせて溝を形成し、口腔内に啞え込めるマウスピース状の本体に、手で支えるための保持部を延設、保持部先端に水道管からのホースなどを連結することができる手段を備えさせ、溝の面に設けた複数のノズルから啞え込んだ歯の両面に向け水を噴出させて歯を洗浄しようとするものである。

【0009】本体は望ましくはゴムなどの軟質な材料で形成することによって、啞える歯や歯茎に対する当たりをソフトなものにする。本体は歯の列のかたちに合わせるので概ねU字状となる。U字状の上下の面にそれぞれ歯を収容する溝を設けるので、本体の断面は、概ねH字状となる。

【0010】上下の溝の前後両面にそれぞれ、収容される歯の面に向け、多数のノズルを設ける。ノズルはランダムな位置に設けても、一定間隔で整列させて設けてもよい。また、ノズルの噴出向きは歯の方へ向いていればよく、方向は任意に設定すればよい。

【0011】本体からは、この本体を手元で保持し得るように取手状の保持部を延設する。そして保持部末端には水道管に接続するための接続部を設け、端部の開口から各ノズルまでを連通する内部の連通管で接続する。このようにして、本体を口腔内において歯で咥え、溝の中に収容した歯の両面にノズルから適当な水圧を加え、水道水で洗浄することができる。

【0012】本体は全部の歯を1回で洗浄できるように、前記のようなU字状としてもよいが、口腔の狭い人などのためには、U字を縦に2分してJ字状とし、左右2回に分けて洗浄するようにすることもできる。

【0013】歯の洗浄は水道水のみで行ってもよいが、薬液を併用すればさらに効果がある。そのために本発明では、保持部に洗浄薬液を収容する薬液槽と、該薬液槽から保持部内の連通管に洗浄薬液供給を制御するバルブとを備えるようにし、必要に応じて洗浄用の薬液も供給できるようにした。

【0014】また、保持部に水道水の流量調節弁を備え、本体に供給される水量を調整可能とすることで、必要な水圧を得ることができ、さらに使用しやすいものとすることができる。

【0015】このような本発明の口腔洗浄装置を使用することによって、病人や、手の不自由な人、寝たきりの人、高齢者などであっても使用が簡単で、洗浄効果が充分にあり、しかも本人でなく、介護をする人にも扱いやすく、歯の面に付着した食物の渣や歯垢を効率よく除去して虫歯を予防する効果があり、また、歯石の沈着を防止し、歯周炎を防止し、歯肉マッサージ効果も得られる。

#### 【0016】

【実施例】図1に、本発明の口腔洗浄装置の第1の実施例の概観斜視図を示す。図1(A)は上面側、同(B)は下面側より見た図である。両図において、1は本体であって、好ましくはゴム状の柔らかな材料で形成し、人体の口腔内の歯列に沿って概ねU字状に彎曲させてあり、上面から下方へ向けて溝1aを形成し、また、下面にもほぼ同様の溝1bが下面から上方へ向け形成されている。本体1を口腔内に咥えた場合、溝1a内には人体の、上の歯を収容可能となる。同様に溝1bには下の歯が収容できる構造となっている。従って、断面は概ねH字状となる。なお、溝1a、1bの両末端はそれぞれ閉じてある。

【0017】2は保持部である。保持部2は本体1を前記のように口腔内に挿入して上下の歯で咥えた場合、前記本体から口腔外の手元方向へ伸びるように延設した部分であって、この部分を手で保持して使用するとともに、先端には水道管からの給水ホースが接続される接続部2aを備える。2bは接続部2a面に突出させた、ホース脱落を防止する突起である。

【0018】1a<sub>1</sub>は前記溝1aの前後の側壁に設けた

ノズルである。ノズル1a<sub>1</sub>は、溝1a内に入り込んだ歯の前後面にそれぞれ対面するような位置に、複数を一定間隔で形成する。下側の溝1bの前後の側壁にも同様に複数のノズル1b<sub>1</sub>が形成される。

【0019】保持部2の接続部2a先端には水道管から給水するための開口が設けられ、この開口は保持部2内を貫通する連通管2cに連なる。連通管2cはさらに延設されて本体1のU字状の部分内の管1cに連通し、この管は前記の複数のノズル1a<sub>1</sub>、1b<sub>1</sub>のすべてに連通する。従って、接続部2aから供給される水は複数のノズル1a<sub>1</sub>、1b<sub>1</sub>から噴出することになる。

【0020】このような口腔洗浄装置を使用するには、使用者本人、あるいは介護する者が本体1を対象者の歯に咥えるか、咥えさせる。上側の溝1a内には人体の上の歯が収容され、下側の溝1bには下の歯が収容される。このような状態で、あらかじめ水道管と連結されている保持部2をしっかりと保持し、水道管の蛇口を開く。ノズル1a<sub>1</sub>、1b<sub>1</sub>から水が噴出して歯の洗浄が開始される。水道管の蛇口のバルブを調整して適当な水圧とすることによって効率的に歯の洗浄を行うことができる。

【0021】図2は本発明の口腔洗浄装置の第2の実施例の構造説明図である。前記第1の実施例と同様の部分は同様の符号を付し説明を省略する。1は歯洗浄部である本体、2は本体1から延設した保持部である。3は薬液槽であって、歯や口腔の洗浄に適する薬液、トリクロサンを含む殺菌液や、塩素系、アルコール系、弱酸性などの液体を適正に混合したような公知の洗浄液を収容し、保持部2内の連通管2cに連通する位置に取り付ける。3aは薬液槽3に収容された薬液を保持部2の内部の管に供給する量を調整し、逆流を防止するバルブとその開閉弁である。

【0022】このような口腔洗浄装置を使用するには、前記第1の実施例同様に、使用者本人、あるいは介護する者が本体1を対象者の歯に咥えるか、咥えさせる。上側の溝1a内には人体の上の歯が収容され、下側の溝1bには下の歯が収容される。このような状態で、あらかじめ水道管と連結されている保持部2をしっかりと保持し、水道管の蛇口を開く。ノズル1a<sub>1</sub>、1b<sub>1</sub>から水が噴出して歯の洗浄が開始される。水道管の蛇口のバルブを調整して適当な水圧とし、併せて薬液槽3のバルブ3aを開く。薬液が流入して、その作用によって、より効率的に歯の洗浄を行うことができる。

【0023】図3は本発明の口腔洗浄装置の第3の実施例の構造説明図である。前記第1の実施例と同様の部分は同様の符号を付し説明を省略する。1は歯洗浄部である本体、2は本体1から延設した保持部である。3は薬液槽であって、歯及び歯肉を含む口腔の洗浄に適する薬液、トリクロサンを含む希消毒薬液などの公知の洗浄液を収容し、保持部2内の連通管2cに連通する位置に取

り付ける。3aは薬液槽3に収容された薬液を保持部2の内部の管に供給する量を調整し、逆流を防止するバルブとその開閉弁である。4は流量調整弁である。水道管から給水される水量を調整し、適正な圧力で歯の洗浄をおこなうため、蛇口のバルブとは別に設ける。

【0024】このような口腔洗浄装置を使用するには、前記第1の実施例同様に、使用者本人、あるいは介護する者が本体1を対象者の歯に咥えるか、咥えさせる。上側の溝1a内には人体の上の歯が収容され、下側の溝1bには下の歯が収容される。このような状態で、あらかじめ水道管と連結されている保持部2をしっかりと保持し、水道管の蛇口を開く。ノズル1a<sub>1</sub>、1b<sub>1</sub>から水が噴出して歯の洗浄が開始される。流量調節弁4を調整して適正な水圧とし、併せて薬液槽3のバルブ3aを開く。薬液が流入して、その作用によって、より効率的に歯の洗浄を行うことができる。なお、本実施例における流量調整弁4はハンドルを回転するバルブ状のものであっても、あるいは保持部2を把持する手で握ることで調整可能なレバー状のものであってもよい。

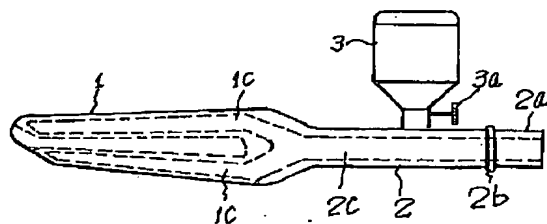
【0025】なお、前記の実施例では、本体1に設けるノズルの位置は一定間隔としたが、ランダムな配置であってもよく、また、ノズルの噴出の方向も自由に設定することもできる。

【0026】また、前記の実施例では、本体1は1個の彎曲したU字状としたが、これを2分してJ字状とし、歯全体を左右の2度に分割して洗浄するようにしてもよい。口腔があまり大きくない人に対してはこの方が使用しやすいものとなる。

【0027】また、前記の実施例では、洗浄に使われ、口腔内から溢れ出る水道水や薬液を回収する装置については触れていないが、吸引装置等を付加して、これを回収するようにすることもできる。

【0028】

【図2】



\*【発明の効果】以上のように本発明によれば、歯の前後からノズルで水を適正な圧力で吹き付け歯を洗浄するようにしたので、歯ブラシによる刷掃が行えない場合に、食後の食渣中に細菌が繁殖するのを防ぐために強くうがいをするのと同様な効果が得られ、虫歯を予防する効果があり、また、歯石の沈着を防止し、歯周炎を予防し、歯肉マッサージ効果もある。

【0029】また、本体を1個のU字状とすれば歯全体を1度に洗浄でき、あるいはこれを2分してJ字状とし、歯全体を左右の2度に分割して洗浄するようにすれば口腔があまり大きくない人に対して使い勝手のよいものとなる。

【0030】さらに、歯に嵌め込む本体から延設した保持部に薬液槽と、その供給を制御するバルブを設けることによって、単に水道水による洗浄よりも効率的な洗浄を行うことができる。

【0031】また、保持部に、水道水の供給を制御する流量調整弁を設けることによって、適正な圧力を容易に得ることができるものとなる。

【図面の簡単な説明】

【図1】(A)、(B)は本発明の第1の実施例の概観斜視図である。

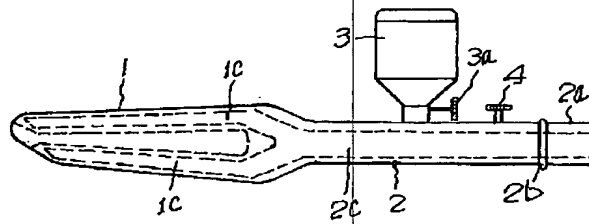
【図2】本発明の第2の実施例の説明的な側面図である。

【図3】本発明の第3の実施例の説明的な側面図である。

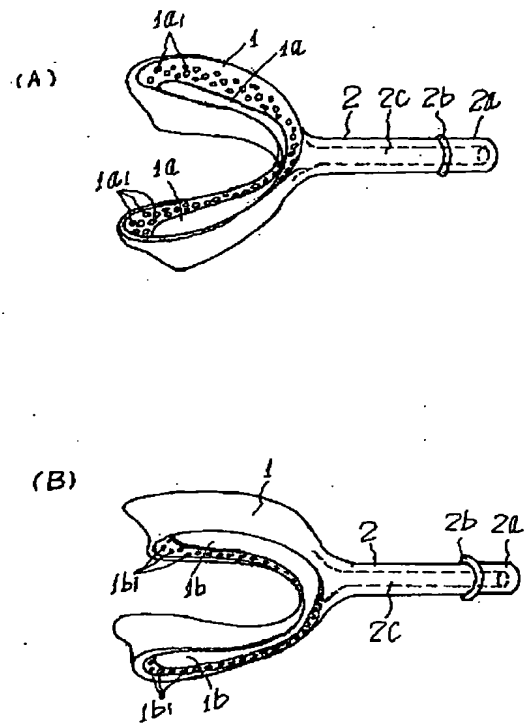
【符号の説明】

1	本体
1a、1b	溝
1a <sub>1</sub> 、1b <sub>1</sub>	ノズル
2	保持部
3	薬液槽
4	流量調整弁

【図3】



【図1】



# PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2002-045378

(43)Date of publication of application : 12.02.2002

(51)Int.Cl.

A61C 17/02  
A61C 17/00

(21)Application number : 2000-270806

(71)Applicant : KENTOSU:KK

(22)Date of filing : 03.08.2000

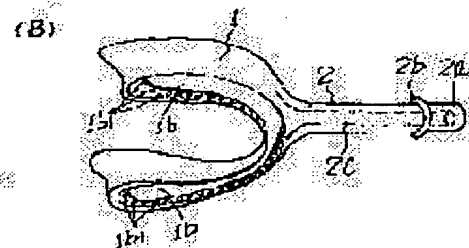
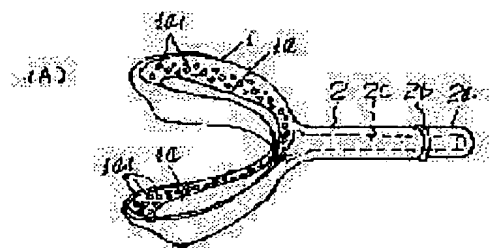
(72)Inventor : MATSUI TOSHIYUKI  
ISHIGURO SABURO  
KAJI JUNYA  
EBIHARA TOSHIYOSHI

## (54) ORAL WASHING IMPLEMENT

### (57)Abstract:

**PROBLEM TO BE SOLVED:** To provide a tooth washing implement which is effective when teeth and gums cannot be washed with a toothbrush.

**SOLUTION:** The implement body 1 is formed from a U-shaped rubber material which is curved along a dentition within an oral cavity of the human body. Slots 1a and 1b are set in the upper and lower surfaces of the implement body, respectively. The implement 1 body has the structure that the upper and lower teeth are held in the upper and lower slots, respectively, and its cross section is almost H-shaped. The part 2 in the figure is an extended holding part which can grasp the implement body 1 at this side of a hand outside the oral cavity when the implement body 1 is put into the oral cavity and held by teeth. Plural nozzles 1a1 and 1b1 which spray a cleaning agent on the front and the rear walls of the slots 1a and 1b are set. The connecting tube 2c which connects the holding part 2a and the nozzles 1a1, 1b1 is formed inside the holding part. The holding end 2c is equipped with a means to be connected to a water pipe hose. Teeth are washed easily by tap water sprayed from the nozzles 1a1 and 1b1.



## LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision  
of rejection]

[Date of requesting appeal against examiner's  
decision of rejection]

[Date of extinction of right]

Copyright (C); 1998,2003 Japan Patent Office



## \* NOTICES \*

Japan Patent Office is not responsible for any damages caused by the use of this translation.

1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. \*\*\*\* shows the word which can not be translated.
3. In the drawings, any words are not translated.

---

CLAIMS

---

## [Claim(s)]

[Claim 1] An oral cavity washing station characterized by providing the following it curves along with a row of teeth in the oral cavity of the body -- making -- a vertical side -- respectively -- a slot -- forming - - a gear tooth of the upper and lower sides of the body to Mizouchi of these upper and lower sides -- respectively -- putting in -- \*\*\*\*\* -- a main part formed by rubber-like material of the shape of a cross section of H characters of structure which can do things An attaching part installed from a main part to a hand side so that said main part might be inserted into the oral cavity and said main part might be held with a hand besides the oral cavity a \*\*\*\*\* case for an up-and-down gear tooth A means to become more, to prepare two or more nozzles which spout a penetrant remover on a wall surface of said slot order both sides, to form in the interior the communicating tube connected from opening of said attaching part end to said two or more nozzles of all, and to combine with a hose of a water pipe at the tip of an attaching part

[Claim 2] A main part is an oral cavity washing station according to claim 1 which considers as the shape of U character in general, or carries out a row of teeth in the oral cavity for 2 minutes, and is characterized by thing [ a thing ] which cover all rows of teeth in the oral cavity, divide into two right and left and cover, and which are made in general into the shape of J character.

[Claim 3] An oral cavity washing station given in claims 1 and 2 characterized by having a bulb which controls washing drug solution supply to the communicating tube in an attaching part from a drug solution tub which holds a washing drug solution in an attaching part, and this drug solution tub.

[Claim 4] An oral cavity washing station given in claims 1, 2, and 3 characterized by enabling adjustment of amount of water which equips an attaching part with a flow control valve of tap water, and is supplied to a main part.

---

[Translation done.]

## \* NOTICES \*

Japan Patent Office is not responsible for any damages caused by the use of this translation.

- 1.This document has been translated by computer. So the translation may not reflect the original precisely.
- 2.\*\*\*\* shows the word which can not be translated.
- 3.In the drawings, any words are not translated.

---

DETAILED DESCRIPTION

---

[Detailed Description of the Invention]

[0001]

[The technical field to which invention belongs] Especially this invention relates to the equipment for making pure the inside of the oral cavity of the body centering on a gear tooth about hygiene equipment.

[0002]

[Description of the Prior Art] About the equipment for cleaning up the inside of the oral cavity of the body, especially dental brushing, there is an effect which removes mechanically the saburra and dental plaque adhering to a dental field, and prevents a cavity, and the deposition of a dental calculus is prevented, periodontitis is prevented and there is the gingival-massage effect. Then, for example, liquids, such as water and a drug solution, are made to blow off from the former with a certain amount of powerful pressure, and there are some which spray this on a gear tooth or the gum, and wash, or train gum. Moreover, the equipment which applies the brush which therefore rotates or reciprocates electric to a gear tooth or gum, and defecates it, or polishes it as an electric toothbrush has also spread.

[0003]

[Problem(s) to be Solved by the Invention] The range of the gear tooth to defecate is not aimed at the partial and large range in the equipment for brushing of the gear tooth of such the conventional body. Therefore, when it was going to defecate the large range in the oral cavity, the activity took time amount and it was not efficient. Moreover, since it was premised on actuation by self, for a sick person, a man with trouble in a hand, elderly people, etc., it was by no means user-friendly. In such conventional equipment, even if this inventions are a bedridden man, a man with trouble in a hand or a sick person, and elderly people, they are easy to use it, and they have the clarification effects of enough, and it aims at moreover being easy to treat not for him but for those who do care.

[0004]

[Means for Solving the Problem] according to this invention, the above-mentioned technical problem curves along with a row of teeth in the oral cavity of the body -- making -- a vertical side -- respectively -- a slot -- forming -- a gear tooth of the upper and lower sides of the body to Mizouchi of these upper and lower sides -- respectively -- putting in -- \*\*\*\*\* -- with a main part formed by rubber-like material of the shape of a cross section of H characters of structure which can do things It consists of an attaching part installed from a main part to a hand side so that said main part may be inserted into the oral cavity and said main part may be held with a hand besides the oral cavity a \*\*\*\*\* case for an up-and-down gear tooth. Two or more nozzles which spout a penetrant remover on a wall surface of said slot order both sides are prepared, the communicating tube connected from opening of said attaching part end to said two or more nozzles of all is formed in the interior, and it is solved by having a means to combine with a hose of a water pipe at the tip of an attaching part.

[0005] Moreover, according to this invention in the above-mentioned technical problem, in the preceding clause, it considers as the shape of U character in general, or a row of teeth in the oral cavity is carried out for 2 minutes, and a main part is solved by [ which cover all rows of teeth in the oral

cavity / so that it may divide into two right and left and may cover / which are made in general into the shape of J character ].

[0006] Moreover, according to this invention, the above-mentioned technical problem is solvable [ from a drug solution tub which holds a washing drug solution, and this drug solution tub ] to an attaching part in a solution means to the preceding clause by equipping the communicating tube in an attaching part with a bulb which controls washing drug solution supply.

[0007] Moreover, the above-mentioned technical problem is solved by enabling adjustment of amount of water which according to this invention equips an attaching part with a flow control valve of tap water in a solution means to the preceding clause, and is supplied to a main part.

[0008]

[Embodiment of the Invention] this invention is \*\*\*\*\* from two or more nozzles which formed the slot according to the form of the gear tooth of the upper and lower sides of the body, and it was made to be equipped with the means which can connect the attaching part for supporting by hand in the oral cavity at a \*\*\*\*\* mouthpiece-like main part at installation and the tip of an attaching part for the hose from a water pipe etc., and were prepared in the field of a slot -- water is made to blow off towards dental both sides, and it is going to wash a gear tooth.

[0009] By forming with a material [ it is desirable and elasticity rubber etc. ], a main part makes the hit to \*\*\*\*\* or the gum soft. Since a main part is set by the form of a dental train, it becomes U character-like in general. Since the slot which holds a gear tooth in the field of the U character-like upper and lower sides, respectively is prepared, the cross section of a main part becomes H character-like in general.

[0010] Many nozzles are prepared in slot order both sides on up-and-down towards the field of the gear tooth held, respectively. Even if it prepares in a random location, a nozzle may be aligned at a fixed gap and may be prepared. Moreover, what is necessary is just to set a direction as arbitration that the jet sense of a nozzle has just turned to dental one.

[0011] From a main part, a Toride-like attaching part is installed so that this main part can be held with a hand. And the connection for connecting with a water pipe is prepared in an attaching part end, and it connects with the communicating tube of the interior which opens from the opening of an edge to each nozzle for free passage. Thus, suitable water pressure can be applied to both sides of the gear tooth which held the main part into \*\*\*\* and a slot for the gear tooth in the oral cavity from a nozzle, and tap water can wash.

[0012] Although it is good also as the shape of U above character so that all gear teeth can be washed at once, for a person with the narrow oral cavity etc., a main part makes U characters length for 2 minutes, makes them the shape of J character, is divided into two right and left, and can be washed.

[0013] Although only tap water may perform dental washing, it is further effective if a drug solution is used together. Therefore, the communicating tube in an attaching part is equipped with the bulb which controls washing drug solution supply from the drug solution tub which holds a washing drug solution in an attaching part, and this drug solution tub, and it enabled it to also supply the drug solution for washing in this invention if needed.

[0014] Moreover, an attaching part shall be equipped with the flow control valve of tap water, required water pressure shall be obtained by enabling adjustment of the amount of water supplied to a main part, and it shall further be easy to use it.

[0015] Use is easy even if it is a sick person, a man with trouble in a hand, a bedridden man, elderly people, etc. by using the oral cavity washing station of such this invention. There are the clarification effects of enough, moreover it is easy to treat not to him but to those who do care, and there is an effect which removes efficiently \*\* and the dental plaque of the food adhering to a dental field, and prevents a cavity, and the deposition of a dental calculus is prevented, periodontitis is prevented, and the gingival-massage effect is also acquired.

[0016]

[Example] The general-view perspective diagram of the 1st example of the oral cavity washing station of this invention is shown in drawing 1 . It is drawing which looked at drawing 1 (A) from the upper

surface side, and looked at \*\* (B) from the inferior-surface-of-tongue side. In both drawings, 1 is a main part, form with a desirable soft rubber-like material, it is made to have curved in the shape of U character in general along with the row of teeth in the oral cavity of the body, and slot 1a is formed towards a lower part from the upper surface, and almost same slot 1b is formed also in the inferior surface of tongue towards the upper part from the inferior surface of tongue. In slot 1a, hold of the upper gear tooth of the body is attained a \*\*\*\*\* case in the oral cavity in a main part 1. It has similarly the structure where a lower gear tooth can be held at slot 1b. Therefore, a cross section becomes H character-like in general. In addition, the both ends of Slots 1a and 1b are closed, respectively.

[0017] 2 is an attaching part. An attaching part 2 is the portion installed so that a main part 1 might be inserted into the oral cavity as mentioned above and it might be extended in the direction of a hand besides the oral cavity from said main part a \*\*\*\*\* case for an up-and-down gear tooth, and it is equipped with connection 2a to which the water supply hose from a water pipe is connected at a tip while it uses this portion, holding it by hand. 2b is a projection which made the connection 2a page project and which prevents hose omission.

[0018] One a1 is the nozzle prepared in the side wall before and behind said slot 1a. A nozzle one a1 forms plurality in a location which meets the gear-tooth order side which entered in slot 1a, respectively at a fixed gap. Two or more nozzles one b1 are formed also like the side wall before and behind lower slot 1b.

[0019] The opening for supplying water at the tip of connection 2a of an attaching part 2 from a water pipe is prepared, and this opening stands in a row in communicating tube 2c which penetrates the inside of an attaching part 2. Communicating tube 2c is installed further, is open for free passage to pipe 1c in the portion of the shape of U character of a main part 1, and opens this pipe for free passage to two or more aforementioned nozzles one a1 and all of one b1. Therefore, the water supplied from connection 2a will be spouted from two or more nozzles one a1 and one b1.

[0020] for using such an oral cavity washing station -- a user -- him or those who cares for -- a main part 1 -- a candidate's gear tooth -- \*\*\*\*\* and \*\*\*\*\* . The gear tooth on the body is held in upper slot 1a, and a lower gear tooth is held in lower slot 1b. In such the condition, the attaching part 2 beforehand connected with the water pipe is held firmly, and the faucet of a water pipe is opened. Water blows off from a nozzle one a1 and one b1, and dental washing is started. A gear tooth can be efficiently washed by adjusting the bulb of the faucet of a water pipe and considering as proper water pressure.

[0021] Drawing 2 is structure explanatory drawing of the 2nd example of the oral cavity washing station of this invention. The same portion as said 1st example attaches the same sign, and omits explanation. The main part whose 1 is the gear-tooth washing section, and 2 are the attaching parts installed from the main part 1. 3 is a drug solution tub, holds a well-known penetrant remover which mixed liquids, such as a drug solution suitable for washing of a gear tooth or the oral cavity, sterilization liquid containing triclosan, and a chlorine system, an alcoholic system, acescence, proper, and attaches it in the location which is open for free passage to communicating tube 2c in an attaching part 2. 3a is the bulb which adjusts the amount which supplies the drug solution held in the drug solution tub 3 to the pipe inside an attaching part 2, and prevents a back flow, and its open clausilium.

[0022] for using such an oral cavity washing station -- said 1st example -- the same -- a user -- him or those who cares for -- a main part 1 -- a candidate's gear tooth -- \*\*\*\*\* and \*\*\*\*\* . The gear tooth on the body is held in upper slot 1a, and a lower gear tooth is held in lower slot 1b. In such the condition, the attaching part 2 beforehand connected with the water pipe is held firmly, and the faucet of a water pipe is opened. Water blows off from a nozzle one a1 and one b1, and dental washing is started. Bulb 3a of the drug solution tub 3 is considered [ adjust the bulb of the faucet of a water pipe and ] as proper water pressure and opened collectively. A drug solution can flow and the operation can wash a gear tooth more efficiently.

[0023] Drawing 3 is structure explanatory drawing of the 3rd example of the oral cavity washing station of this invention. The same portion as said 1st example attaches the same sign, and omits explanation. The main part whose 1 is the gear-tooth washing section, and 2 are the attaching parts installed from the main part 1. 3 is a drug solution tub, holds well-known penetrant removers, such as a drug solution

suitable for washing of the oral cavity containing a gear tooth and gum, and rare disinfectant liquid containing triclosan, and attaches them in the location which is open for free passage to communicating tube 2c in an attaching part 2. 3a is the bulb which adjusts the amount which supplies the drug solution held in the drug solution tub 3 to the pipe inside an attaching part 2, and prevents a back flow, and its open clausilium. 4 is a flow control valve. In order to adjust the amount of water to which water is supplied from a water pipe and to wash a gear tooth by the proper pressure, it prepares apart from the bulb of a faucet.

[0024] for using such an oral cavity washing station -- said 1st example -- the same -- a user -- him or those who cares for -- a main part 1 -- a candidate's gear tooth -- \*\*\*\*\* and \*\*\*\*\* . The gear tooth on the body is held in upper slot 1a, and a lower gear tooth is held in lower slot 1b. In such the condition, the attaching part 2 beforehand connected with the water pipe is held firmly, and the faucet of a water pipe is opened. Water blows off from a nozzle one a1 and one b1, and dental washing is started. Bulb 3a of the drug solution tub 3 is considered [ adjust a flow control valve 4 and ] as proper water pressure and opened collectively. A drug solution can flow and the operation can wash a gear tooth more efficiently. In addition, even if the flow control valve 4 in this example is a bulb-like thing turning around a handle, it may be the thing of the shape of a lever which can be adjusted by grasping by the hand which grasps an attaching part 2.

[0025] In addition, in the aforementioned example, although the location of a nozzle established in a main part 1 was made into the fixed gap, you may be random arrangement and the direction of jet of a nozzle can also be set up freely.

[0026] Moreover, although considered as the one shape of U character which curved, a main part 1 carries out this for 2 minutes, and makes it the shape of J character, and the whole gear tooth is divided into 2 times of right and left, and you may make it wash it in the aforementioned example. To those whose oral cavity is not not much large, it is easy to use this gentleman.

[0027] Moreover, although the aforementioned example is not describing the equipment which collects the tap water which is used for washing and overflows out of the oral cavity, and drug solutions, an aspirator etc. is added and these can be collected.

[0028]

[Effect of the Invention] In order to prevent bacteria breeding in \*\*\*\* after a meal when brushing with a gear-tooth brush cannot be performed as mentioned above according to this invention, since water was washed with the nozzle from gear-tooth order and the blasting gear tooth was washed by the proper pressure, the effect same with gargling strongly is acquired, and there is an effect which prevents a cavity, and the deposition of a dental calculus is prevented, periodontitis is prevented, and there is the gingival-massage effect.

[0029] Moreover, a main part can be washed for the one shape of U character then, and the whole gear tooth at a time, or this is carried out for 2 minutes and it considers as the shape of J character, and if the whole gear tooth is divided into 2 times of right and left and washed, the oral cavity will become what has good user-friendliness to those who are not not much large.

[0030] Furthermore, washing only more efficient than washing by tap water can be performed by preparing a drug solution tub and the bulb which controls the supply in the attaching part installed from the main part inserted in a gear tooth.

[0031] Moreover, a proper pressure can be easily obtained by preparing the flow control valve which controls supply of tap water in an attaching part.

---

[Translation done.]